

# NASA TECH BRIEF



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## Master Control Data Handling Program Uses Automatic Data Input

### The problem:

To design a data handling program that is applicable for use with analysis programs that require basic data and calculated parameters as input. The program must be capable of handling large amounts of data and converting them into usable inputs.

### The solution:

A general purpose digital computer program for use in automatic data input to analysis programs. The program (Master Control Data Handling) is designed to automate input data preparation for flight control computer programs; however, it is also general enough to permit application in other areas.

### How it's done:

The program is used with coupler subprograms to generate inputs to analysis programs. Data needed for any analysis programs are stored in the main program in a master data tape file, special input tapes, or user input cards. Data are requested from the main programs, for particular values of independent variables, by coupler program. Any interpolation, cross-referencing, or other special processing needed is performed in the main program and the resultant dependent variable values are transferred to the coupler. The coupler then calculates all parameters needed for use in the analysis program, punches card decks in correct input format for use with the analysis program or writes a tape for direct input to the program, and prints a summary of all data values used, calculated parameters, and data document sources for all data used.

### Notes:

1. This is a Fortran IV program coded for the IBM 7094.
2. The program can presently store any number of sets of data and for up to 1000 variables. Any combination of these variables and sets of data can be used in calculation of inputs to any analysis programs for which a coupler has been written. The Master Control Data Handling Program is best utilized when there are large amounts of data to be handled and converted into usable inputs for analysis programs.
3. It is possible to extend the scope of the Master Control Data Handling Program to other analysis areas. It can also be used to reduce data to usable forms for specific applications.
4. Inquiries concerning this innovation should be directed to:

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Reference: B67-10280

### Patent status:

No patent action is contemplated by NASA.

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